

## DRAWINGS ATTACHED

(21) Application No. 54219/69 (22) Filed 5 Nov. 1969

(23) Complete Specification filed 2 Nov. 1970

(45) Complete Specification published 9 Aug. 1972

(51) International Classification G07F 17/32 17/34

(52) Index at acceptance

G4V H8 HX

A6H 4B2

(72) Inventors ROY PARKINSON ASHWORTH and  
DAVID RICHARD WILCOX

## (54) AMUSEMENT MACHINE

(71) We, PHONOGRAPHIC TECHNICAL LIMITED, a British Company, of Phonographic House, Claremont Road, London, N.W.2, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

THIS INVENTION relates generally to amusement machines of the kind which are commonly used in funfairs, amusement arcades, clubs, hostelrys, and public houses, and more particularly to an amusement machine (known as an amusement-with-prize or gaming machine) of the said kind in which a user, who will hereinafter be referred to as a "player", can, in certain circumstances, win a prize.

Automatic machines are known in which the player inserts a coin or token and activates the machine, for example by pulling a lever or pressing a button, and after he has no further control. A random selection mechanism over which the player has no control decides whether or not he will win a prize. Other types of machine are known in which the winning of a prize may depend wholly or partly on an action of the player, based on a decision he makes after studying circumstances connected with the operation of the machine.

According to this invention there is provided a coin or token operable amusement-with-prize or gaming machine comprising first, second and third random selection mechanisms, an indicating device containing a number of positions at which a first symbol may be indicated, the position at which the first symbol is indicated being determined by the first random selection mechanism, the indicating device also containing an equal number of positions at which a second symbol may be indicated, the position at which the second symbol is indicated being determined by the second random selection mechanism, each of the first symbol positions at which they may be indicated being placed in a predetermined associatedly paired relation-

ship to each of the second symbol positions, the machine being so arranged that if a first and a second symbol appear in positions having the predetermined associatedly paired relationship to each other the machine attains a prize winning condition, the magnitude of the prize obtainable from the machine in this condition being determined by the third random selection mechanism.

Preferably, the machine of the preceding paragraph constitutes a first machine unit and there is provided a second machine unit comprising means to indicate any one of a number of symbols at any one of three positions, one of the symbols being identical with the said first or second symbol, the second machine unit also comprising three further random selection mechanisms to indicate the symbols in the second machine unit, the second machine unit being so arranged that if the said first or second symbol is indicated thereby, the operation of the first machine unit is modified to give a player an increased chance of winning a prize in respect of the indications in the first machine unit, or if a predetermined combination of symbols other than the said first or second symbols is indicated in the second machine unit the player will win a prize corresponding in value to at least that obtainable in respect of the indications in the second machine unit alone, provided that said first and second symbols are not indicated in their predetermined relationship in the first machine unit.

One embodiment of the invention will now be described, by way of example, with reference to the accompanying drawings in which:—

Figure 1 is a pictorial view of an automatic amusement machine embodying two automatic units of different types;

Figure 2 is a schematic diagram illustrating the operation of the first machine unit; and

Figure 3 is a diagram showing the general layout of the visible parts of the second machine unit.

Referring first to Figure 1, the machine

comprises a cabinet 11 of console type having an upper vertical panel 12, a sloping panel 13 and a lower vertical panel 14. The cabinet has plain sides and a plain back. The machine could alternatively be arranged in a "counter type" cabinet which may stand on a counter or a special stand on a table.

The visible parts of the first machine unit are placed within a frame 15 mounted on the upper panel 12. The upper panel 12 also contains a plate 16 having a coin or token slot 17 and a slot 18 through which rejected coins or token appear. The panel 12 may also contain a plate 19 to accept a coin of a different denomination to the coin slot 17 and give change, which is directed into a receptacle 20 carried on the lower panel 14 from which the player may recover the change. The upper panel 12 also contains a push button 21 which when operated enables the player to collect his accumulated winnings either in the form of coins or tokens representing particular values.

The first machine unit of which the visible parts are contained within the frame 15 is generally of a kind in which two symbols are indicated. Either of the symbols may appear in a number of different positions and the position of each of the indications is selected by a random selection mechanism. If these two symbols appear in positions which have a predetermined relationship to each other than the player wins. In the machine according to the invention the amount he wins is also selected by a third random selection mechanism which indicates the odds in his favour. These odds may range between 1 and 10. Thus, if the two symbols are in the correct relative positions then the machine will automatically pay out an amount corresponding to the odds selected by the third random selection mechanism. For example, if the player has inserted sixpence ( $2\frac{1}{2}$  p.) and the two symbols are so placed that he wins and the odds selected by the machine are 8—1 then the machine will pay eight sixpences ( $2\frac{1}{2}$  p. coins) or tokens. These may be obtained by pressing the button 21 whereupon they are ejected into the receptacle 20. Further details of the first machine unit will be given later but in order to obtain a full understanding of the inter-relationship between the two machine units it is desirable to describe the second machine unit.

The visible parts of the second machine unit are carried on the sloping panel 13 within a frame 22. Inside the frame is a glass panel 23 which is marked to define an instruction section 24, four windows, respectively 25, 26, 27 and 28, an indicator section 29 which will be more particularly described later. The four windows 25 to 28 are each divided into two equal portions by central horizontal lines 30. The panel 24 also contains three arrows 31, 32 and 33. Behind

each of the three windows 25, 26 and 27 is a narrow drum marked in a manner similar to the drums employed in the automatic machines known as "fruit" machines. These show symbols representing various types of fruit, for example, oranges, lemons, grapes, etc. and may include pictorial representations of another object which is not a fruit, such as a bell. In addition the drums contain one or other of the symbols which are associated only with the first machine unit. Behind the window 28 is a fourth drum similar to those used in the ordinary fruit machine containing numbers in random order and these may range between 1 and 10. They represent the odds which the machine will pay at the end of a particular game.

In the machine being described the first machine unit mounted on the panel 12 is a representation of part of a football field showing two players and a ball, and this is arranged on a glass panel 52. The panel 52 is provided with a number of symbols representing a football which are not normally visible but become visible when illuminated from the rear. These are distributed over the panel 52. Adjacent each representation of a football there is a symbol representing an arrow, also hidden but capable of being made visible when illuminated from the rear and each arrow is immediately beneath a football. One random selection mechanism is arranged to select an arrow symbol and a second random selection mechanism is arranged to select a ball symbol, the control being indicated in Figure 2 which shows eighteen representations of a football 53 and eighteen representations of an arrow 54. The schematic wiring diagram is also shown in which cables 55 and 56 represent a line from each ball 53 and cables 57 and 58 represent one line from each arrow 54. The ball and arrow symbols on the machine panel 52 are not in rows and columns as shown in Figure 2 but are distributed over panel 52, the only requirement being that a representation of an arrow is placed beneath each representation of a ball. During each game a random selection mechanism 37 selects an arrow at a very early stage in the machine cycle while at the end of the machine cycle the second random selection mechanism 38 selects a representation of a ball. The random selection mechanisms 38 and 37 are connected by cables respectively 39 and 40 to further circuitry 41 which will actuate a coin feed or credit accumulator mechanism (not shown) of conventional type if the arrow and ball symbols selected by the respective random selection mechanisms are in adjacent positions.

A plan view of the machine panel 23 of the second machine unit is shown in Figure 3, the four windows 25, 26, 27 and 28 being shown, together with the two side panels 24 and 29 and the three arrows 31, 32 and 33.

As previously mentioned, the three drums bearing various fruit symbols also have symbols which relate to the first machine unit, and in the embodiment being described these are football symbols. Football symbols are shown in the three windows at 41, 42 and 43. The window 28 contains a drum which is marked with numbers and these represent the odds which the machine will pay. The windows 25, 26, 27 and 28 are sufficiently wide for the symbols on each side of those shown under the centre line 30 to be visible, as illustrated with respect to window 25, where a plum symbol 45 and bell symbol 46 are also illustrated.

The player commences by inserting one or a number of coins in the slot 17. If he chooses to insert a number of coins each representing a credit for one game the number of credits is indicated by a cyclometer type indicator contained in a space 46 in the panel 52 of the first machine unit. Having inserted at least one coin he has placed the machine in operative condition and he may then operate the machine by pressing a hinged flap 47 which actuates a push button. This starts the automatic cycle of the machine. An arrow position is selected by the random selector 37 and is illuminated. The second random selector 38 runs for a longer period and only makes its selection at the end of the machine cycle. At the same time the four drums behind the windows 25, 26, 27 and 28 are started and these are stopped in turn at random intervals of time, the drum behind the window 25 stopping first and the drum behind the window 28 stopping last, at the same time as the random selector 38. When the last-mentioned device stops a football symbol is illustrated. If the symbols 54, 53 representing the arrow and the ball are in correct juxtaposition then the machine automatically pays the odds indicated on the fourth drum behind the window 28. If any one of the three drums behind the windows 25, 26, 27 stops in such a position that a representation of a ball 41 is visible in any of the three positions indicated at the window 25 then at least one, preferably two, more arrows are illuminated. Thus if a football symbol 41 should appear in any one of the nine possible positions behind the three windows this causes additional arrows 54 to be illuminated, two additional arrows 54 being illuminated for each ball which becomes visible. Hence if a football symbol 41 is visible behind each of the three windows a total of seven arrow symbols 54 will be illuminated on the panel 52 and the player therefore has seven chances, instead of one chance of winning. As previously stated the odds indicated on the drum behind the window 28 may vary between 1 (evens) and 10 in which case the machine pays odds of 10—1. The machine may be so arranged that instead of

the winnings being paid out directly, they are recorded as extra credits on the indicator 46. The player may obtain coins or tokens corresponding to the winnings or the credits shown by pressing button 21.

When the machine has recorded a winning credit that is the end of the game. The player may if he desires start another game either by inserting an additional coin in the slot 17 or using another of the credits shown on the indicator 46. However, the ball symbol 41 may nowhere appear on the panel 23 and the ball symbol 53 may not appear in correct juxtaposition to its related arrow symbol 54, but nevertheless it may happen that two "fruit" devices appear on the centre line 30 on at least the drums behind windows 25 and 26, in which case the machine will automatically credit the win, not as shown in window 28 but according to the table shown in the panel 29. The player may be even more fortunate and three identical "fruit" devices may appear behind the windows 25, 26 and 27, located on the centre line 30. In this case also the machine will record the credit or pay out the winnings according to the odds indicated in the panel 29 and not as shown behind the window 28.

It may happen that ball and arrow symbols 53, 54 appear in correct juxtaposition behind the panel 52 and the three drums behind the windows 25, 26 and 27 also produce a winning combination of "fruit" devices. In this case the machine will automatically compare the odds shown behind the window 28 and the odds shown on the panel 29 for the winning combination which has appeared on the three drums and will add credits corresponding to the higher of the two sets of odds shown.

It may happen that the player does not achieve a winning arrangement of ball and arrow symbols 53, 54 on the panel 52 and he achieves two identical "fruit" devices behind the centre line 30 with two of the three drums. He may then press two of three buttons, respectively 48, 49 and 50, and by inserting another coin or using another credit reactivate the machine by pressing the flap 47. Pressing the buttons 48 and/or 49 and/or 50 causes the corresponding arrow 31, 32 or 33 to be illuminated and when the machine is again activated the two drums involved are held still while the third drum rotates and is eventually stopped at a random position. The first machine unit also operates, so the player may be fortunate in achieving correctly positioned ball and arrow symbols on the panel 52, or the drum which has been activated may indicate a fruit device identical with those shown on the two drums which have been held. In either case the machine will credit the appropriate odds and if the player has been lucky enough to win on both the first machine unit and the second machine

70

75

80

85

90

95

100

105

110

115

120

125

130

unit, the machine will pay out the higher of the two sets of odds.

From the foregoing description it will be evident that while two machine units have been combined which each have the characteristic that winning combinations are selected at random, an added interest is provided in that if a combination of devices is produced at the windows 25, 26 and 27 which hold out the prospect of a future win the player may, by pressing one, or two of the "hold" buttons, make a second attempt to win with a bias in his favour.

If ball symbols 41 should appear in any of the three possible positions behind any of the windows 25, 26 and 27, the player may also hold either one or two of the drums by pressing the appropriate button(s) 48, 49 or 50, in which case he is assured of extra arrows 54 at the next operation of the machine.

If a player has pressed either one or two of the buttons 48, 49 and 50 and he changes his mind he may cancel the reserve by pressing a further button 51.

The random selection mechanisms may be of known type.

#### WHAT WE CLAIM IS:—

1. A coil or token operable amusement-with-prize or gaming machine comprising first, second and third random selection mechanisms, an indicating device containing a number of positions at which a first symbol may be indicated, the position at which the first symbol is indicated being determined by the first random selection mechanism, the indicating device also containing an equal number of positions at which a second symbol may be indicated, the position at which the second symbol is indicated being determined by the second random selection mechanism, each of the first symbol positions at which they may be indicated being placed in a predetermined associatedly paired relationship to each of the second symbol positions, the machine being so arranged that if a first and a second symbol appear in positions having the predetermined associatedly paired relationship to each other the machine attains a prize winning condition, the magnitude of the prize obtainable from the machine in this condition being determined by the third random selection mechanism.

2. A machine as claimed in claim 1 in which the machine comprises a panel having a pictorial representation of a football game.

3. A machine as claimed in claim 2 in which the indicating device contains first symbols representing footballs which are indicated when selected by the first random selection device.

4. A machine as claimed in claim 3 in which the indicating device contains second symbols in the form of arrows each of which is placed to point to one of the football

symbols, the arrows being indicated when selected by the second random selection device, a wind occurring if a selected arrow symbol points to a selected football symbol.

5. A machine as claimed in any preceding claim in which the third random selection device indicates numbers representing the odds which the machine pays when in said prize-winning condition, the odds being the value of the coin or token originally inserted multiplied by the indicated number.

6. A coin or token operated amusement-with-prize or gaming machine in which a machine as claimed in any preceding claim constitutes a first machine unit, and in which there is provided a second machine unit comprising means to indicate any one of a number of symbols at any one of three positions, one of the symbols being identical with the said first or second symbol, the second machine unit also comprising three further random selection mechanisms each arranged to indicate symbols in the second machine unit, the second machine unit being so arranged that if the said first or second symbol is indicated thereby, the operation of the first machine unit is modified to give a player an increased chance, of winning a prize in respect of the indications in the first machine unit, or if a predetermined combination of symbols other than the first or second symbols is indicated in the second machine unit the player will win a prize corresponding in value to at least that obtainable in respect of the indications in the second machine unit alone, provided that said first and second symbols are not indicated in their predetermined relationship in the first machine unit.

7. A machine as claimed in claim 6 in which the second machine unit is of a kind known as a "fruit" machine and comprises three drums each containing symbols representing fruits or other conventional symbols and one symbol identical with the said first or second symbols, the three drums providing the three further random selection mechanisms.

8. A machine as claimed in claim 7 in which each drum, in addition to the conventional symbols, has said one symbol as a representation of a football.

9. A machine as claimed in claims 5 and 6 in which the said third random selection mechanism is constituted by a fourth drum in the second machine unit, the fourth drum having numbers representing odds marked around its periphery.

10. A machine as claimed in claim 8 comprising means to cause at least one additional one of the second symbols of the first machine unit to be illuminated for each football indicated on one of the drums of the second machine unit.

11. A machine as claimed in claim 6 comprising means to pay out a predetermined

number of coins or tokens if a particular arrangement of symbols other than said first or second symbol appears on the second machine unit.

- 5 12. A machine as claimed in claim 6, comprising means to compare the odds payable in respect of a win indicated by the first machine unit and a win indicated by the second machine unit, and to dispense coins or  
10 tokens corresponding to the higher of the odds.

13. A coin or token operable amusement-with-prize or gaming machine arranged and adapted to operate substantially as herein described, with reference to and as illustrated in the accompanying drawings. 15

EDWIN C. AXE & CO.,  
27, Chancery Lane,  
London, W.C.2,  
Chartered Patent Agents,  
Agents for the Applicants.

Printed for Her Majesty's Stationery Office, by the Courier Press, Leamington Spa, 1972.  
Published by The Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from  
which copies may be obtained.

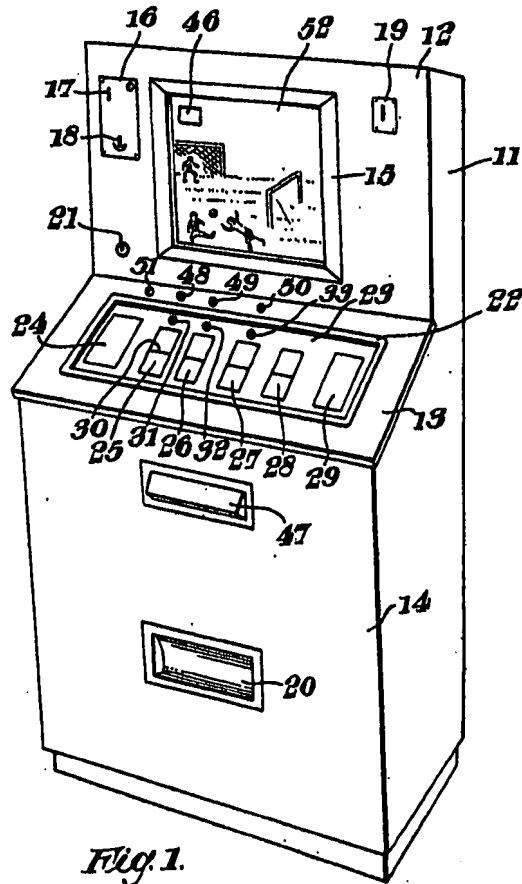


Fig. 1.

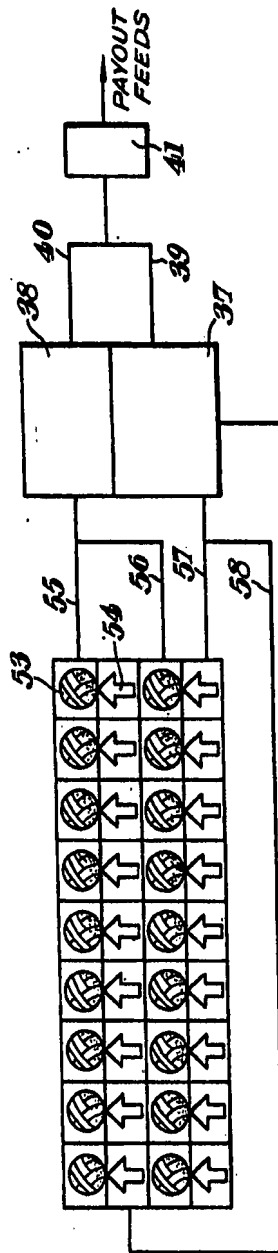


Fig. 2.

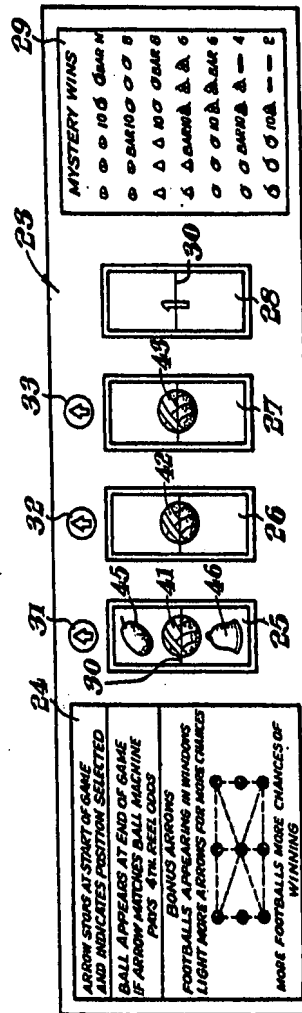


Fig. 3.